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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/666,521	09/20/2000	Jun Koyama	SEL 209	6933

7590 12/03/2003

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EXAMINER	
NGUYEN, KIMNHUNG T	
ART UNIT	**PAPER NUMBER**
2674	15

DATE MAILED: 12/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

TS

Office Action Summary	Application No.	Applicant(s)	
	09/666,521	KOYAMA, JUN	
	Examiner	Art Unit	
	Kimnhung Nguyen	2674	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

This Application has been examined. The claims 1-36 are pending. The examination results are as following.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-3, 5-7, 9-12, 14-16, 18-22, 24-26, 28-31 and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al. (US patent 6,072,450) in view of Yamazaki et al. (US patent 6,388,652 cited by Application).

3. Regarding claims 1, 9, 19 and 28, Yamada et al. disclose in figures 1-4 and 17 that an electronic device comprising an EL display device (1) including a thin film transistor (Q1, Q2, Q3, Q4); an EL element (39) with the pixel electrode as a cathode; and an insulating layer for sealing the EL element (see abstract, and see figure 17, column 15, lines 34-45), and a source driver circuit (see figure 20). However, Yamada et al. do not disclose a source driver circuit for applying an analog image signal to the EL element; and a correction circuit for gamma-correcting the analog image signal. Yamazaki et al. disclose in figure 14, an EL display (see column 17, lines 32-35) comprising a source driver circuit (25) for applying as analog signal of RGB to the EL element; and a correction circuit for gamma-correcting the analog image signal (16) correcting means for gamma correcting the analog image signal (18, see figures 14-15,

column 18, lines 23-30), and therefore, the thin film transistor, the pixel electrode, the EL element, the insulating layer, the applying means and the correcting means are formed over a same substrate (see Yamazaki et al. of figure 14). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of using the a source driver circuit for applying as analog signal of RGB to the EL element; and a correction circuit for gamma-correcting the analog image signal correcting means for gamma correcting the analog image signal as taught by Yamazaki et al. into the device system of Yamada et al. because this would for analog signals transmitted from outside are RGB signals having a horizontal and vertical synchronization signals and performing extension of a time axis and are outputted as analog signals (see column 17, lines 55-62).

Regarding claims 1, 10, 20 and 29, Yamada et al. do not disclose a memory for storing data for gamma-correcting. Yamazaki et al. disclose a memory (17) for storing data for gamma-correcting (see figure 14). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of using the memory as taught by Yamazaki et al. into the device system of Yamada et al. because this would for performing extension of a time axis and are outputted as analog signals (see VRAM 17, see column 17, lines 59-62).

Regarding claims 3, 12, 22 and 31, Yamada et al. disclose a color filter being formed at position corresponding to the pixel electrode (see column 12, lines 28-49).

Regarding claims 5-6,14-15, 24-25 and 33-34, Yamada et al. do not disclose wherein the gamma-correcting amplifies a signal of red, or gamma-correcting attenuates a signal of blue or

green. Yamazaki et al. disclose wherein the gamma-correcting amplifies a signal of red and inherent of attenuates a signal of blue or green (see figure 14, column 18, lines 23-31).

Regarding claims 7, 16, 26 and 35, Yamada et al. do not disclose wherein the gamma-correcting is independently applied for each of signals of blue, green and red. Yamazaki et al. disclose the gamma-correcting is independently applied for each of signals of blue, green and red (see figure 14). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of using gamma-correcting is independently applied for each of signals of blue, green and red as taught by Yamazaki et al. into the system of Yamada et al. because this would provide an improvement an EL display having correction values for driving conditions of individual surface of the electron beam.

Regarding claims 11, 18, 21 and 30, Yamada et al. disclose wherein the EL display device is used in an electronic device selected form the group consisting of an EL display.

4. Claims 8, 17, 27 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al. (US patent 6,072,450) and Yamazaki et al. (US patent 6,388,652 cited by Applicant) as applied to claims 1, 9, 19 and 28 above, and further in view of Yamazaki et al. (US patent 6,445,005).

Yamada et al. and Yamazaki (6,388,652) disclose every feature of the claimed invention as discussed above, excluding wherein the EL element comprises a luminescent layer comprising a polymer organic material. Yamazaki et al. (6,445,005) disclose an EL layer (45) is formed and made of polymer type organic material (see column 10, lines 37-40). It would have been

obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of using the an EL layer is formed and made of polymer type organic material as taught by Yamazaki et al. (6,445,005) into the device system of Yamazaki et al. (6,388,652) because this would for providing light of white color to be a light emitting layer (see Yamazaki et al., see column 10, lines 62-63).

5. Claims 4, 13,23 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al. (US patent 6,072,450) and Yamazaki et al. (US patent 6,388,652) as applied to claims 1, 9, 19 and 28 above, and further in view of Choi et al. (US patent 6,583,577).

Yamada et al. and Yamazaki (6,388,652) disclose every feature of the claimed invention as discussed above, excluding wherein the El element comprises a first pixel comprising a blue luminescent layer, a second pixel comprising a green luminescent layer, and a third pixel comprising a red luminescent layer. Choi et al. disclose in figures 2 and 4 an El element comprises a first pixel (B) comprising a blue luminescent layer, a second pixel (G) comprising a green luminescent layer, and a third pixel (R) comprising a red luminescent layer (see first to third EL diodes, see figure 4, see abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the teachings of using the first, second and third pixels comprising blue, green and red by EL diodes as taught by Choi et al. because this would be independently driven without a complicatedly-designed data driving circuit, thereby simplifying the data driving circuit as well as reducing the product cost (see abstract).

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimnhung Nguyen whose telephone number (703) 308-0425.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **RICHARD A HJERPE** can be reached on **(703) 305-4709.**

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D. C. 20231

Or faxed to:

(703) 872-9314 (for Technology Center 2600 only).

Hand-delivery response should be brought to: Crystal Park II, 2121 Crystal Drive, Arlington, VA Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Kimnhung Nguyen
November 28, 2003

RICHARD HJERPE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600